

Appl. No. : 09/676,727
Filed : September 29, 2000

REMARKS

The foregoing amendments are responsive to the May 29, 2008 Office Action. Applicant respectfully request reconsideration of the present application in view of the foregoing amendments and the following remarks.

Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410.

Response to Rejection of Claims 2-22 and 42-54 Under 35 U.S.C. 112 First Paragraph

In the Office Action of May 29, 2008 the Examiner has rejected these claims citing the words “compute a physical effect” in independent Claims 2 and 10. Applicant has amended Claims 2 and 10 replacing these words with “at least one of an electromagnetic field, a heat flux, an electric field, a magnetic field, a vector potential, a pressure, a sound wave, a particle flux, a weak nuclear force, a strong nuclear force, and a gravity force.”

Response to Rejection of Claims 1, 34, 40, and 41 Under 35 U.S.C. 112 Second Paragraph

In the Office Action of May 29, 2008 the Examiner has rejected these claims as being indefinite. Claims 34, 40, and 41 depend on Claim 1. Applicant has amended Claim 1 to remove the indefinite references to “said computing system” in lines 31-33 and has removed the reference to “said use” on line 32. Furthermore, Applicant has modified the second to last line of the claim to clarify the “resulting electric field” in the last step of the claim.

Response to Rejection of Claim 7 Under 35 U.S.C. 112 Second Paragraph

In the Office Action of May 29, 2008 the Examiner has rejected this claim as being indefinite. Applicant has amended Claim 7 to clarify the reference to the first and second plurality of directions.

Response to Rejection of Claims 1-22, 34, and 40-55 Under 35 U.S.C. 101

In the Office Action of May 29, 2008 the Examiner rejected Claims 1-22, 34, and 40-55 under 35 U.S.C. 101 because the invention disclosed in the claims is directed to non-statutory

subject matter. The Examiner's position is clarified by considering remarks under the section "Claim Interpretation" on Page 7 of the Office Action. The Examiner states,

"For the purpose of claim examination, the Examiner will interpret "compute a physical effect" as "obtain any number(s) computed from the "sources" or "physical sources" including all types of actual and/or fictitious sources". In other words, a physical effect may represent a fictitious effect from fictitious sources."

In the Application as filed, Page 8 lines 12-17 state,

"A magnetic current is another example of a fictitious source that is often used. It is generally assumed that magnetic monopoles and magnetic currents do not exist (while electric monopoles and electric currents do exist). Nevertheless, it is known how to mathematically relate electric currents to equivalent magnetic currents to produce the same electric waves. The use of magnetic sources is widely accepted, and has proven very useful for certain types of calculations."

As an example, it is well known in the art that one can accurately compute the radar wave that is reflected from a body and that is due to an incident radar wave either by using real electric currents (consisting of moving electric charges) or by using magnetic currents (consisting of fictitious magnetic monopoles) on that body. Thus, the use of fictitious sources in some step of a computation does not prevent the result from having a real practical application. Similarly, the use of numbers and other abstractions within a computation does not imply that the result of that computation is necessarily not a practical result.

While the examples given above were not intended to imply limitations to the current method, they do provide a context for the meaning of the words in the specification. The words sources and physical sources "include all types of actual and/or fictitious sources." However, even when fictitious sources are used in some step of a method, the Electric Field computed is an actual Electric Field, not a fictitious quantity." Similarly, "at least one of an electromagnetic field, a heat flux, an electric field, a magnetic field, a pressure, a sound wave, a particle flux, a weak nuclear force, a strong nuclear force, and a gravity force" also refers to some real physical quantity.

Applicant asserts that although an abstraction might be used in an intermediate step of producing a practical result, there is a practical result recited in each of these claims. Furthermore, these claims do not preempt all uses of the judicial exception involved, since they do not preempt applications to economic data. They also do not preempt numerous applications to image compression.

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The requirement of non-preemption, when it applies, does not limit a claimed invention to only one particular application. According to MPEP 2106 IV C 3, “One may not patent a process that comprises every ‘substantial practical application’ of an abstract idea, …” Thus, it is sufficient to find one “substantial practical application” that is not within the claimed invention. Applicant respectfully asserts that he has done so.

Summary

Applicant respectfully assert that Claims 1-22, 34, and 40-55 are allowable over the prior art, and Applicant request allowance of Claims 1-22, 34, and 40-55. If there are any remaining issues that can be resolved by a telephone conference, the Examiner is invited to call the undersigned attorney at (949) 721-6305 or at the number listed below.

Respectfully submitted,

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Dated: November 25, 2008

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